

Amendment to the Claims:

Please cancel claims 9 and 19 without prejudice to or disclaimer of the underlying subject matter. This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) A polymer sheet comprising:
a polymeric layer; and,
a plurality of domains distributed throughout said polymeric layer, wherein said domains comprise an agent dispersed in a liquid, wherein said agent ~~that~~ causes an alteration in the amount of visible light that can be transmitted through said polymer sheet in response to the application of an electric field to said polymer sheet, and wherein said polymeric layer comprises poly(vinyl butyral); ~~polyurethane, polyvinyl chloride, or poly(ethylene vinyl acetate).~~
2. (original) The polymer sheet of claim 1, wherein said domains are in the form of a microcapsule.
3. (original) The polymer sheet of claim 2, wherein said microcapsule comprises a dielectric material encapsulated in a polymeric coating, and wherein said agent is disposed in said dielectric material.
4. (currently amended) The polymer sheet of claim 3, wherein said polymeric coating comprises poly(vinyl butyral), gelatin, polyvinyl alcohol, cellulosic derivatives, acacia, carageenan, hydroxylate styrene anhydride copolymers, methyl vinyl ether co-maleic anhydride copolymers, polyvinyl pyridine, polyacrylonitrile, polystyrene, poly(methyl methacrylate), poly(butyl methacrylate), polyhydroxy amide with aldehyde, melamine formaldehyde resin, urea formaldehyde resin, ~~styrene, methyl methacrylate, acrylonitrile, diacyl chloride, vinyl acetate, acrylic acid, butyl acrylate, t-butyl acrylate,~~ water soluble oligomers of the condensate of melamine, water soluble oligomers of urea, ~~or~~ water soluble oligomers of formaldehyde, or polymers of any of the following: diacyl chloride, vinyl acetate, acrylic acid, butyl acrylate, or t-butyl acrylate.

5. (original) The polymer sheet of claim 3, wherein said dielectric material is selected from the group consisting of a low molecular weight poly(chlorotrifluoroethylene), perfluorinated polyether, aliphatic hydrocarbons, triethylene glycol bis(2-ethyl hexanoate), and a mixture of triethylene glycol (2-ethyl hexanoate) and triethylene glycol bis(2-ethyl hexanoate).
6. (original) The polymer sheet of claim 1, wherein said agent is selected from the group consisting of anatase titania, rutile titania, barium sulfate, silica, magnesium silicate, calcium carbonate, indium tin oxide, antimony tin oxide, carbon black, zinc oxide, lanthanum hexaboride, gold, silver, copper, platinum, palladium, and alloys of the foregoing.
7. (original) The polymer sheet of claim 1, wherein said agent is selected from the group consisting of titania, silica, carbon black, gold, and silver.
8. (original) The polymer sheet of claim 1, wherein said application of an electric field causes said agent to agglomerate.
9. (cancelled)
10. (currently amended) The polymer sheet of claim 1 ~~claim 9~~, wherein said polymeric layer further comprises a plasticizing agent.
11. (currently amended) A multiple layer glass panel, comprising:
 - a first layer comprising,
 - a polymeric layer; and,
 - a plurality of domains distributed throughout said polymeric layer, wherein said domains comprise an agent dispersed in a liquid, wherein said agent ~~that causes an alteration in~~ the amount of visible light that can be transmitted through said first layer in response to the application of an electric field to said first layer, and wherein said polymeric layer comprises poly(vinyl butyral), ~~polyurethane, polyvinyl chloride, or poly(ethylene vinyl acetate);~~

a second layer comprising an electrically conductive polymeric sheet disposed in contact with said first layer;

a third layer comprising an electrically conductive polymeric sheet disposed in contact with said first layer opposite said second layer; and

at least one layer of glass.

12. (original) The multiple layer glass panel of claim 11, wherein said domains are in the form of a microcapsule.

13. (original) The multiple layer glass panel of claim 12, wherein said microcapsule comprises a dielectric material encapsulated in a polymeric coating, and wherein said agent is disposed in said dielectric material.

14. (currently amended) The multiple layer glass panel of claim 13, wherein said polymeric coating comprises poly(vinyl butyral), gelatin, polyvinyl alcohol, cellulosic derivatives, acacia, carageenan, hydroxylate styrene anhydride copolymers, methyl vinyl ether co-maleic anhydride copolymers, polyvinyl pyridine, polyacrylonitrile, polystyrene, poly(methyl methacrylate), poly(butyl methacrylate), polyhydroxy amide with aldehyde, melamine formaldehyde resin, urea formaldehyde resin, ~~styrene, methyl methacrylate, acrylonitrile, diacyl chloride, vinyl acetate, acrylic acid, butyl acrylate, t-butyl acrylate,~~ water soluble oligomers of the condensate of melamine, water soluble oligomers of urea, ~~or~~ water soluble oligomers of formaldehyde, or polymers of any of the following: diacyl chloride, vinyl acetate, acrylic acid, butyl acrylate, or t-butyl acrylate.

15. (original) The multiple layer glass panel of claim 13, wherein said dielectric material is selected from the group consisting of a low molecular weight poly(chlorotrifluoroethylene), perfluorinated polyether, aliphatic hydrocarbons, triethylene glycol bis(2-ethyl hexanoate), and a mixture of triethylene glycol (2-ethyl hexanoate) and triethylene glycol bis(2-ethyl hexanoate).

16. (original) The multiple layer glass panel of claim 11, wherein said agent is selected from the group consisting of anatase titania, rutile titania, barium sulfate, silica, magnesium silicate,

calcium carbonate, indium tin oxide, antimony tin oxide, carbon black, zinc oxide, lanthanum hexaboride, gold, silver, copper, platinum, palladium, and alloys of the foregoing.

17. (original) The multiple layer glass panel of claim 11, wherein said agent is selected from the group consisting of titania, silica, carbon black, gold, and silver.

18. (original) The multiple layer glass panel of claim 11, wherein said application of an electric field causes said agent to agglomerate.

19. (cancelled)

20. (currently amended) The multiple layer glass panel of claim 11 ~~claim 19~~, wherein said polymeric layer further comprises a plasticizing agent.

21. (original) The multiple layer glass panel of claim 11, wherein said polymeric sheet of said second layer comprises polyethylene terephthalate.

22. (original) The multiple layer glass panel of claim 21, wherein said polyethylene terephthalate is coated with an electrically conductive material selected from the group consisting of indium tin oxide, antimony tin oxide, indium zinc oxide, metallic coatings, polyaniline, and a conductive polymer.

23. (original) The multiple layer glass panel of claim 11, wherein said polymeric sheet of said third layer comprises polyethylene terephthalate.

24. (original) The multiple layer glass panel of claim 23, wherein said polyethylene terephthalate is coated with an electrically conductive material selected from the group consisting of indium tin oxide, antimony tin oxide, indium zinc oxide, metallic coatings, polyaniline, and a conductive polymer.

25. (original) The multiple layer glass panel of claim 11, further comprising a fourth layer comprising poly(vinyl butyral) disposed in contact with said second layer.

26. (original) The multiple layer glass panel of claim 25, further comprising a fifth layer comprising poly(vinyl butyral) disposed in contact with said third layer.

27. (original) The multiple layer glass panel of claim 26, further comprising a sixth layer of glass disposed in contact with said fourth layer and a seventh layer of glass disposed in contact with said fifth layer.

28.-43. (cancelled)

44. (currently amended) A method of reducing light transmission through an opening, comprising:

providing a multiple layer glass panel in said opening, wherein said multiple layer glass panel comprises a first layer comprising,

a polymeric layer; and,

a plurality of domains distributed throughout said polymeric layer, wherein said domains comprise an agent dispersed in a liquid, wherein said agent that causes a reduction in the amount of visible light that can be transmitted through said first layer in response to the application of an electric field to said first layer, and wherein said polymeric layer comprises poly(vinyl butyral), ~~polyurethane, polyvinyl chloride, or poly(ethylene vinyl acetate);~~

a second layer comprising an electrically conductive polymeric sheet disposed in contact with said first layer; and,

a third layer comprising an electrically conductive polymeric sheet disposed in contact with said first layer opposite said second layer; and,

connecting a voltage source to said second layer and said third layer, thereby generating an electric field across said first layer.

45. (original) The method of claim 44, wherein the extent to which said light transmission is reduced is dependent in part on the duration of application of said voltage source.

46. (currently amended) A method of reversibly reducing light transmission through an opening, comprising:

providing a multiple layer glass panel in said opening, wherein said multiple layer glass panel comprises a first layer comprising,

a polymeric layer, wherein said polymeric layer comprises poly(vinyl butyral); ~~polyurethane, polyvinyl chloride, or poly(ethylene vinyl acetate)~~; and,

a plurality of domains distributed throughout said polymeric layer, wherein said domains comprise an agent dispersed in a liquid, wherein said agent ~~that~~ causes an alteration in the amount of visible light that can be transmitted through said first layer in response to the application of an electric field to said first layer;

a second layer comprising an electrically conductive polymeric sheet disposed in contact with said first layer; and,

a third layer comprising an electrically conductive polymeric sheet disposed in contact with said first layer opposite said second layer;

connecting a voltage source to said second layer and said third layer, thereby generating an electric field across said first layer; and,

reversing the polarity of said voltage source to said second layer and said third layer, thereby reversing said electric field.

47. (currently amended) A multiple layer glass panel comprising:

a first glass layer having an electrically conductive coating;

a second glass layer having an electrically conductive coating;

a polymeric layer disposed between said first glass layer and said second glass layer, wherein said polymeric layer comprises poly(vinyl butyral); ~~polyurethane, polyvinyl chloride, or poly(ethylene vinyl acetate)~~; and,

a plurality of domains distributed throughout said polymeric layer, wherein said domains comprise an agent dispersed in a liquid, wherein said agent ~~that~~ causes an alteration in the amount of visible light that can be transmitted through said polymer layer in response to the application of an electric field to said polymer layer.

Amendment Dated April 12, 2006
Reply to Office Action of March 10, 2006
Express Mail #: EQ694298278US

Brenc Law Matter Number 1001.009
SN-10/736,695

48. (cancelled)